IN THE CLAIMS:

Please amend the claims as follows (all claims listed):

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1. (Previously Presented) A method for providing a system for high fidelity reproduction of the acoustic signal from a selected type of acoustical generator, the method comprising:

(1) determining a selected location proximate to an acoustical generator;

(2) placing a first microphone at said selected location;

(3) separately generating sounds from the acoustical generator to produce sounds as picked up by the first microphone;

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(4) playing reference sounds of the acoustical generator;

(5) comparing the sounds of the acoustical generator as picked up by the first microphone with the reference sounds as generated by the acoustical generator;

(6) determining first and second differences in level over first and second respective discrete frequency ranges between the sounds of the acoustical generator as picked up by the first microphone at the selected location and the reference sounds as generated by the acoustical generator;

(7) assembling a first filter element, said first filter element including components selected to compensate for said first difference in level over said first discrete frequency range;

(8) assembling a second filter element, said second filter element including components selected to compensate for said second difference in level over said second discrete frequency range;

(9) constructing an equalizer for the first microphone by arranging said first and second filter elements so as to compensate for the first and second differences between the sounds as picked up by the microphone at the selected location and the reference sounds as generated by the acoustical generator.

2. (Previously Presented) The method of claim 1 wherein in said placing step, said first microphone is attached to the acoustical generator.

3. (Previously Presented) The method of claim 1 wherein the step of comparing the sounds picked up by the first microphone with reference sounds of the acoustical generator is made by listening directly to the two sounds.

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4. (Previously Presented) The method of claim 2 wherein the step of comparing the sounds picked up by the first microphone with reference sounds of the acoustical generator is made by listening directly to the two sounds.

5. (Previously Presented) A method for providing a system for high fidelity reproduction of the acoustic signal from a selected type of acoustical generator, the method comprising:

(1) determining a selected location proximate to a first embodiment of a selected type an acoustical generator;

(2) placing a first microphone at said selected location;

(3) separately generating sounds from the acoustical generator, to produce sounds as picked up by the first microphone;

(4) playing reference sounds of the acoustical generator;

(5) comparing the sounds of the acoustical generator as picked up by the first microphone with the reference sounds as generated by the acoustical generator;

(6) replacing the first embodiment of the acoustical generator of step (1) with a next embodiment of the selected type of acoustical generator:

(7) repeating steps (2) through (5) with the next embodiment of the selected type of acoustical generator;

(8) constructing a tailor-made equalizer for the first microphone, said equalizer including an arrangement of tailored filter elements to compensate for differences between the sounds as picked up by the microphone at the selected location and the reference sounds as generated by the acoustical generator.

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6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Previously Presented) A system for high fidelity electronic reproduction of the acoustic signal from a selected type of acoustical generator, the system comprising:

a microphone element adapted to be placed at a specified selected location proximate to the acoustical generator; and

an equalizer that includes an arrangement of at least first and second filter elements to compensate for respective first and second differences in level between the sounds of the acoustical generator as picked up by the microphone at the selected location compared with corresponding reference sounds as generated by the acoustical generator over respective first and second discrete frequency ranges.

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14. (Previously Presented) The system of claim 13 wherein the microphone element is further adapted to be attached to a preselected location on the acoustical generator.

15. (Original) The system of claim 14 wherein said equalizer includes at least one digital filter.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

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23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Previously Presented) The method of claim 1 wherein in said constructing step, the tailored filter elements include variable controls.

29. (Previously Presented) The method of claim 5 wherein in said constructing step, the tailored filter elements include variable controls.

30. (Currently Amended) The system of claim 13 wherein in said ~~constructing step~~ equalizer, the tailored filter elements include variable controls.

31. (Previously Presented) The method of claim 1 wherein at least one of frequency-bandwidth, gain, and Q parameters of at least one of said first and second filter elements has a limited variability range of operation based on the determining operation of step 6.

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32. (Currently Amended) A method for providing a system for high fidelity reproduction of the acoustic signal from a selected type of acoustical generator, the method comprising:

(1) determining a selected location proximate to an acoustical generator;

(2) placing a first microphone at said selected location;

(3) separately generating sounds from the acoustical generator to produce sounds as picked up by the first microphone;

(4) playing reference sounds of the acoustical generator;

(5) comparing the sounds of the acoustical generator as picked up by the first microphone with the reference sounds as generated by the acoustical generator;

(6) determining first and second differences in level over first and second respective discrete frequency ranges between the sounds of the acoustical generator as picked up by the first microphone and the reference sounds as generated by the acoustical generator; and

(7) constructing an equalizer for the first microphone to compensate for the first and second differences between the sounds as picked up by the microphone at the selected location and the reference sounds as generated by the acoustical generator wherein at least one of frequency-bandwidth, gain, and Q parameters of <u>a filter element included to compensate for the differences of</u> at least one of said first and second frequency ranges has a limited variability range of operation based on the determining operation of step 6.

33. (New) The method of claim 1 wherein at least one of the first and second filter elements includes

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at least two adjustable parameters selected from the following: gain adjustment parameter, frequency adjustment parameter, bandwidth adjustment parameter, and filter shape adjustment parameter; and

a single control to make concurrent, predetermined changes to said at least two adjustable parameters.

34. (New) The method of claim 5 wherein at least one of the first and second filter elements includes

at least two adjustable parameters selected from the following: gain adjustment parameter, frequency adjustment parameter, bandwidth adjustment parameter, and filter shape adjustment parameter; and

a single control to make concurrent, predetermined changes to said at least two adjustable parameters.

35. (New) The system of claim 13 wherein at least one of the first and second filter elements includes

at least two adjustable parameters selected from the following: gain adjustment parameter, frequency adjustment parameter, bandwidth adjustment parameter, and filter shape adjustment parameter; and

a single control to make concurrent, predetermined changes to said at least two adjustable parameters.

36. (New) The method of claim 1 wherein a range of gain adjustment of the first filter element differs from a range of gain adjustment of the second filter element.

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37. (New) The method of claim 5 wherein a range of gain adjustment of the first filter element differs from a range of gain adjustment of the second filter element.

38. (New) The method of claim 13 wherein a range of gain adjustment of the first filter element differs from a range of gain adjustment of the second filter element.

39. (New) The method of claim 1 wherein at least one of frequency-bandwidth, filter order, and Q parameters differs between said first and second filter elements.

40. (New) The method of claim 5 wherein at least one of frequency-bandwidth, filter order, and Q parameters differs between said first and second filter elements.

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41. (New) The method of claim 13 wherein at least one of frequency-bandwidth, filter order, and Q parameters differs between said first and second filter elements.